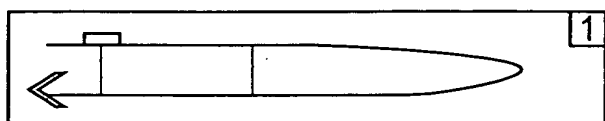
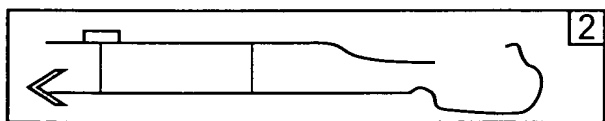


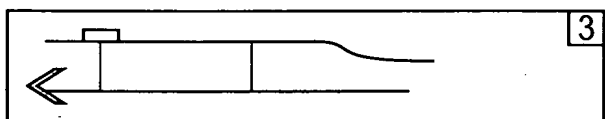
PUTATIVE C-PEPTIDE CONTAINING IMPURITIES. ALL OF THE EXAMPLES SHOW
"INSULIN C-PEPTIDE LIKE IMMUNOREACTIVITY"



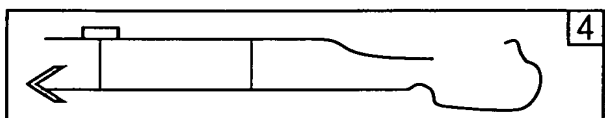
PREPROINSULIN WITH OR WITHOUT
PRE-SEQUENCE.
MODEL TEST COMPOUND:
PURIFIED PPI



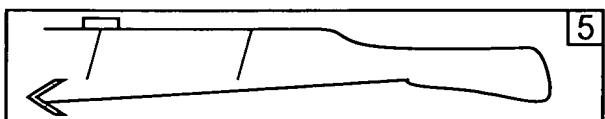
PREPROINSULIN WITH OR WITHOUT
PRE-SEQUENCE, CLEAVED AT THE
ACID LABILE DP SITE.
MODEL TEST COMPOUND:
PURIFIED PPI CLEAVED WITH
ENDO ASP-N AT THE EDP SITE.



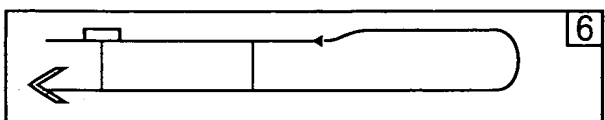
PREPROINSULIN WITH OR WITHOUT
PRE-SEQUENCE, UNPROCESSED AT
THE N-TERMINAL BORDER OF A-CHAIN.



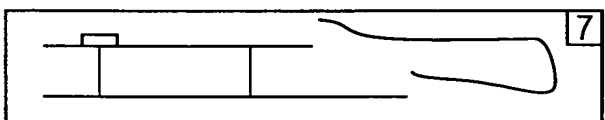
PREPROINSULIN WITH OR WITHOUT
PRE-SEQUENCE, UNPROCESSED AT
THE C-TERMINAL BORDER OF B-CHAIN.
MODEL TEST COMPOUND:
HIA2 PPI



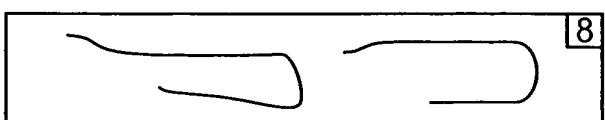
INCORRECTLY FOLDED OR UNFOLDED
PREPROINSULIN WITH OR WITHOUT
PRE-SEQUENCE.
MODEL COMPOUND:
PURIFIED PPI WITH REDUCED S-S
BONDS AND ALKYLATED CYSTEINES.



PREPROINSULIN OF HIA2
IT CAN BE USED AS A MODEL TEST
COMPOUND FOR 4.



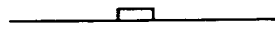
ISOLATED MONKEY C-PEPTIDE FROM
HI OR MUTATED C-PEPTIDE FROM HIA2
IN THE PRESENCE OF CORRECTLY
PROCESSED INSULIN.



ISOLATED C-PEPTIDES FROM HUMAN
INSULIN.
MODEL TEST COMPOUNDS TO CHECK
INFLUENCE FROM DEVIATIONS IN
SEQUENCE OR AMINO ACID
COMPOSITION.

FIG. 1A

EXPLANATIONS



= A-CHAIN OF INSULIN



= B-CHAIN OF INSULIN



= C-PEPTIDE

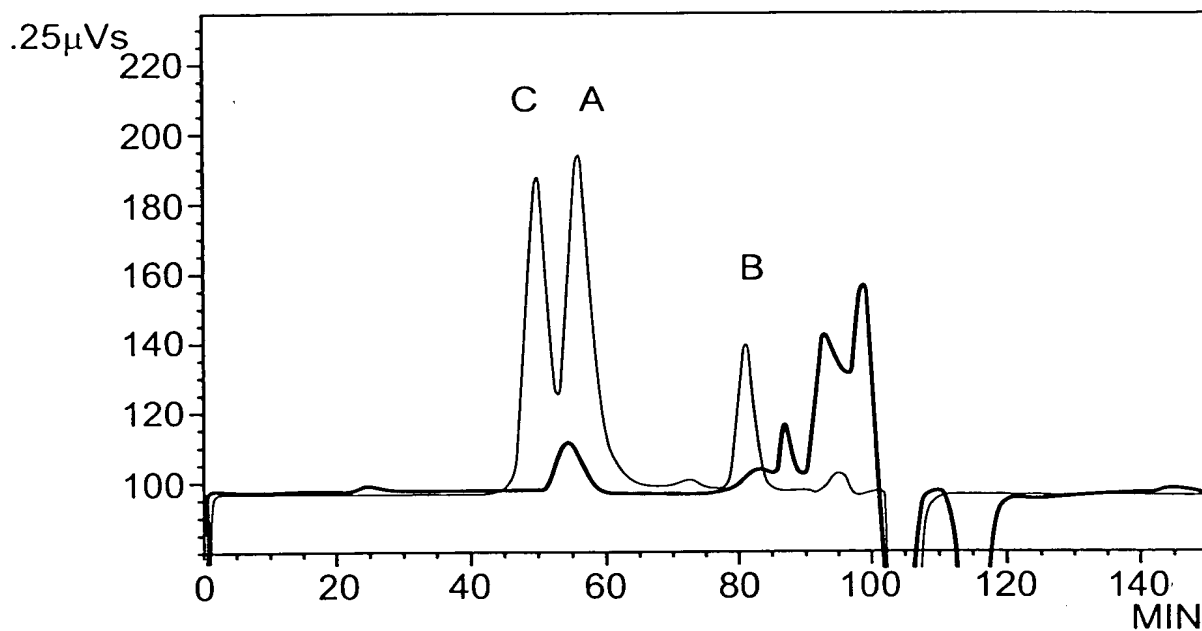


= PRESEQUENCE OF RECOMBINANT
INSULINS



= COVALENT BOND BETWEEN "SH"
OF CYSTEINES

FIG. 1B



ADC1 A, SIGNAL FROM PC LOOP (5\SDPE_008.D)

ADC1 A, SIGNAL FROM PC LOOP (5\SDPE_031.D)

FIG. 2

100 90 80 70 60 50 40 30 20 10 0

ILLUSTRATION OF 6 DIFFERENT INSULIN C-PEPTIDE
STANDARD CURVES AS OBTAINED IN THE BEAD ASSAY

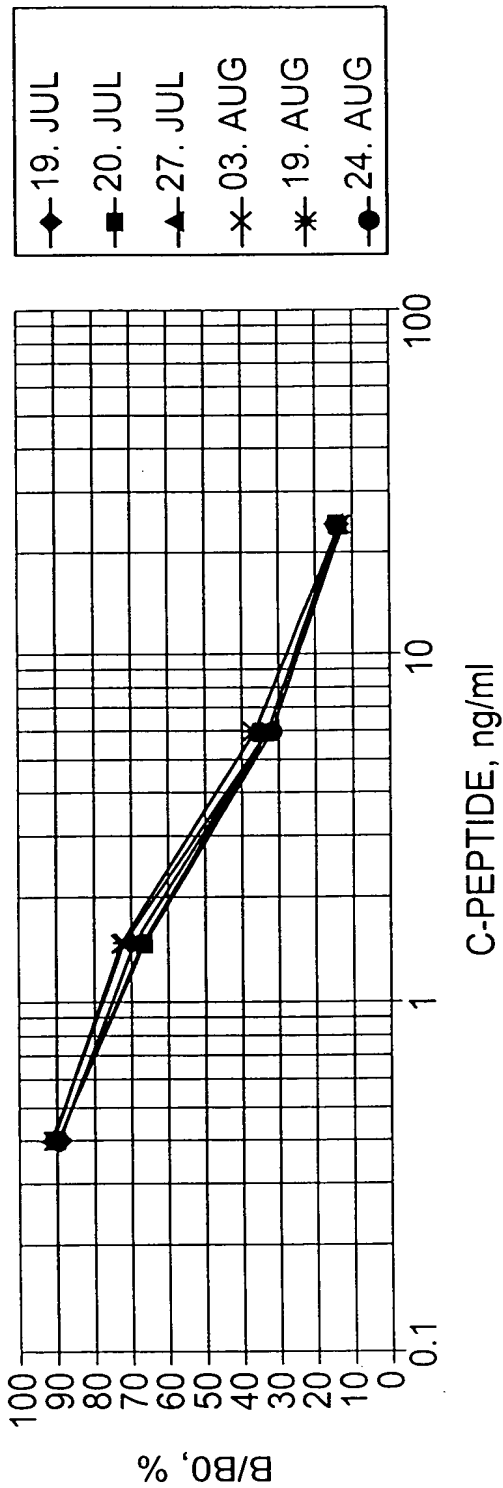
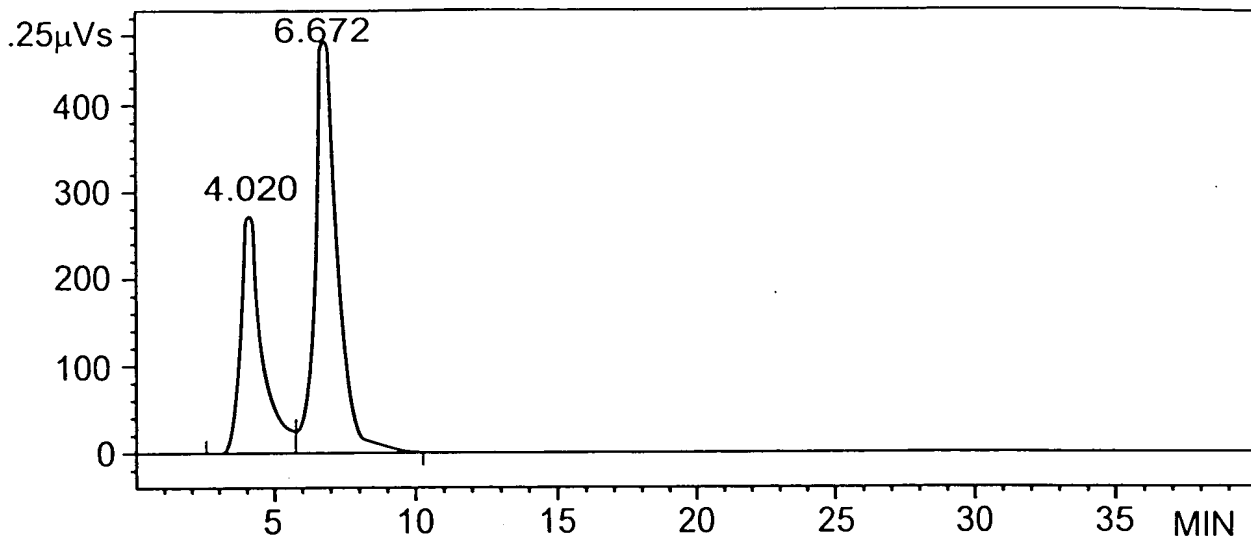
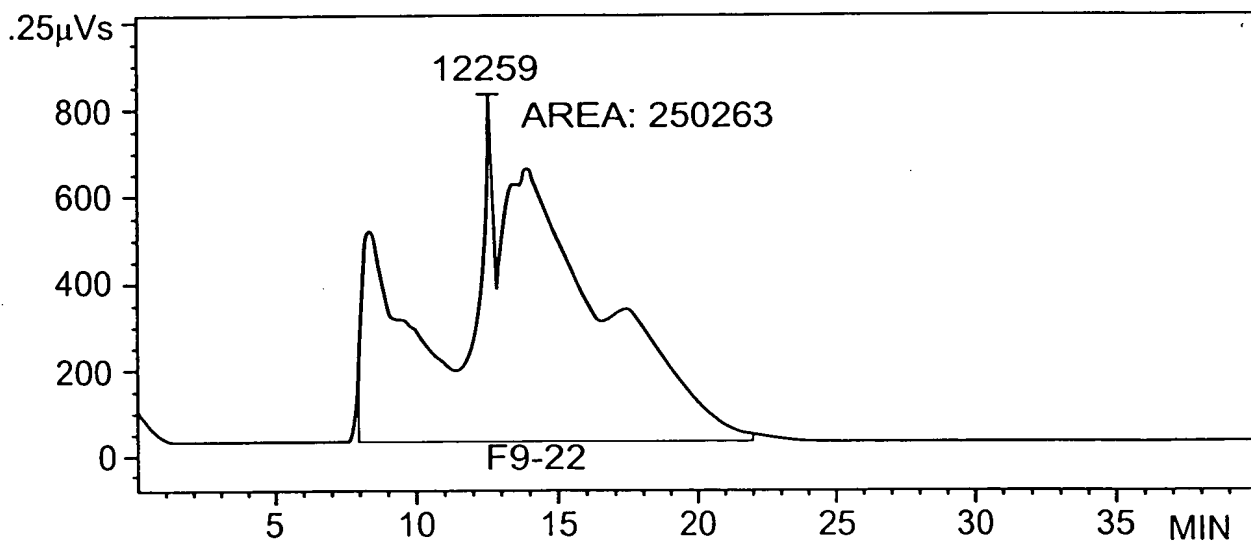


FIG. 3



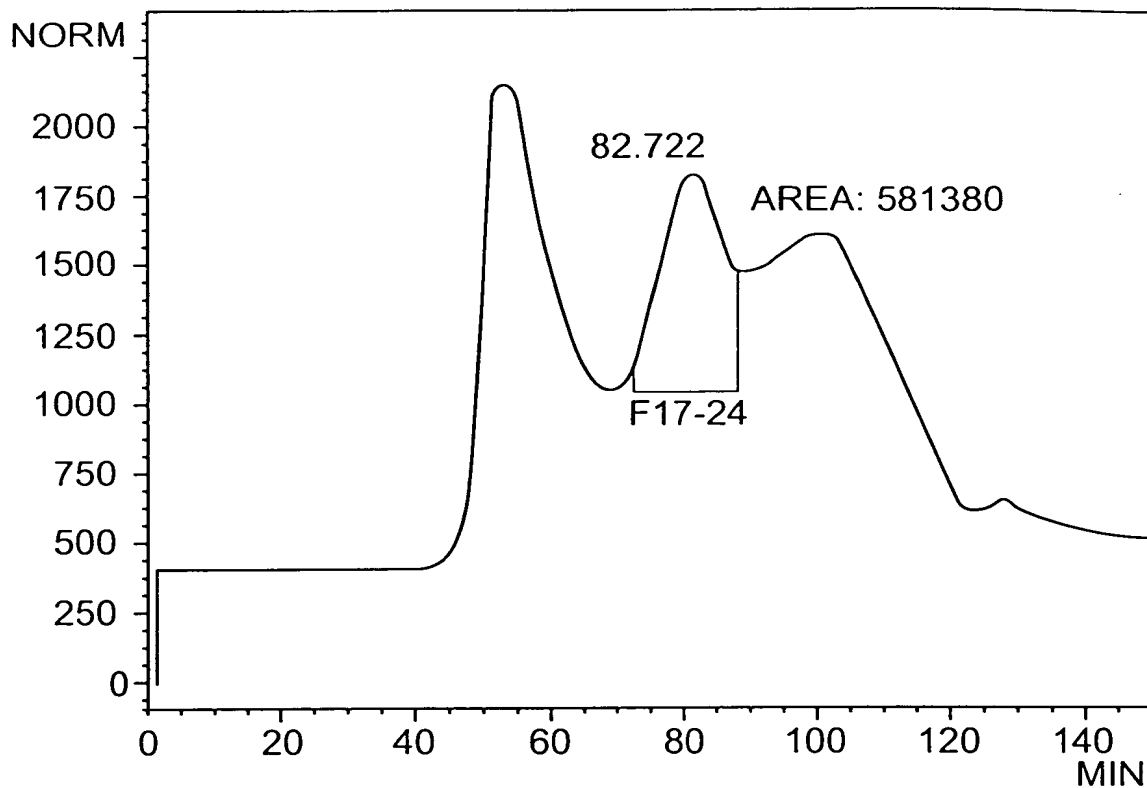
ADC1 A, SIGNAL FROM PC LOOP (4VAZL_109.D)

FIG. 4A



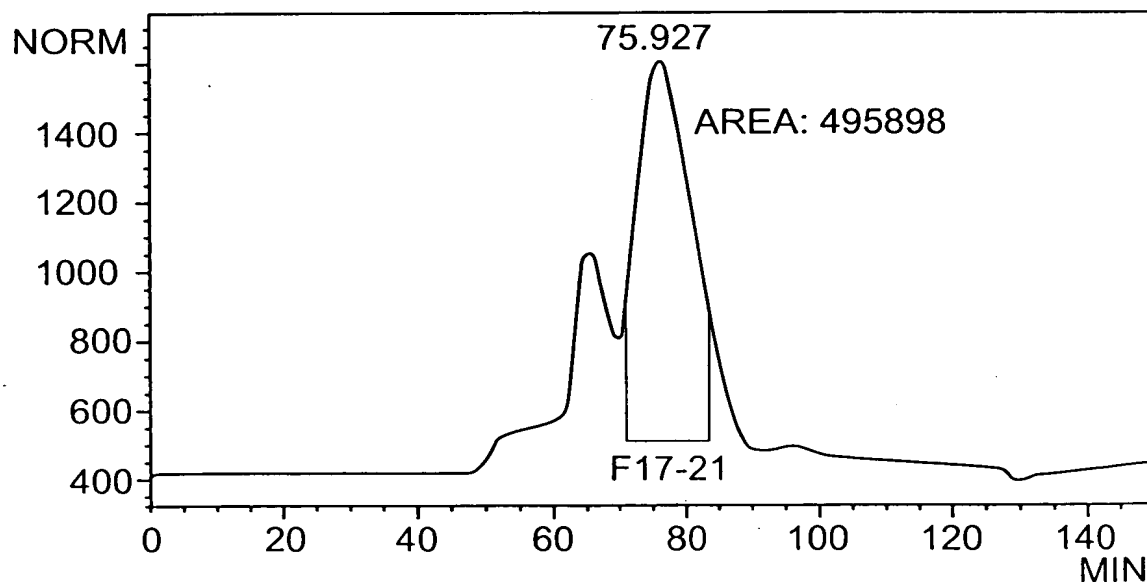
ADC1 A, SIGNAL FROM PC LOOP (4VAZL_108.D)

FIG. 4B



ADC1 A, SIGNAL FROM PC LOOP (6\SD2_652.D)

FIG. 5



ADC1 A, SIGNAL FROM PC LOOP (6\SD2_656.D)

FIG. 6

HI PPI
REDUCED /
ALKYLATED

HI PPI
DIGESTED
WITH ENDO
ASP-N

HI PPI
REDUCED/
ALKYLATED
DIGESTED
WITH ENDO
ASP-N

FIG. 7

ANALYSIS OF DIFFERENT CONTROL ANTIGENS USING
THE COATED BEAD CHEMILUMINESCENCE ASSAY

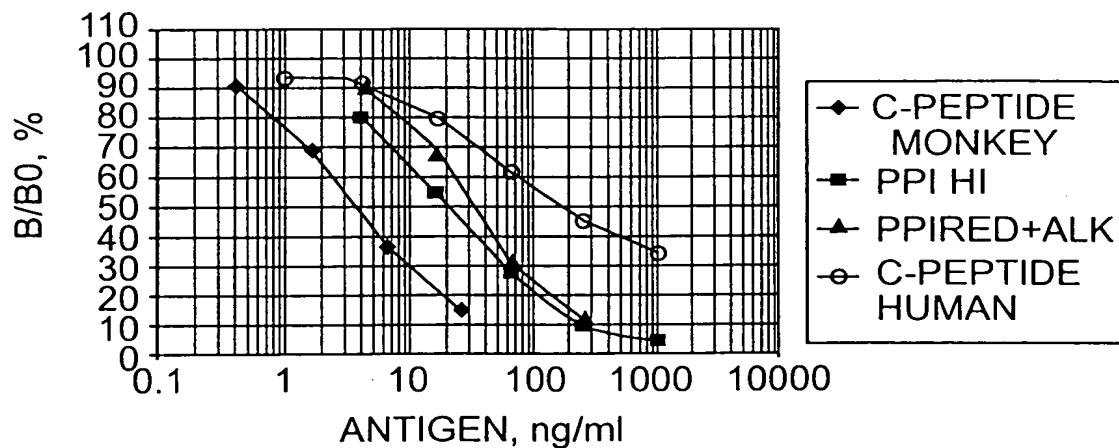


FIG. 8

ANALYSIS OF DIFFERENT CONTROL ANTIGENS USING
THE COATED BEAD CHEMILUMINESCENCE ASSAY

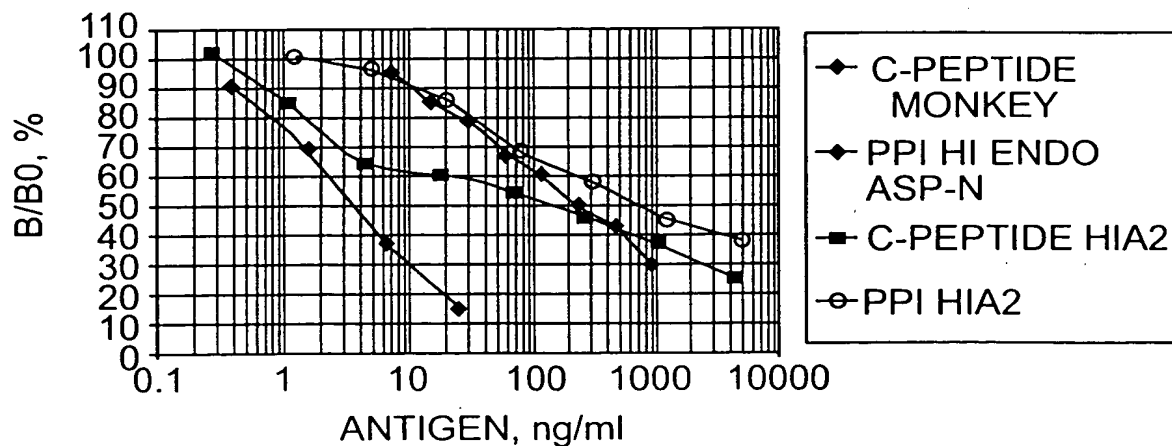


FIG. 9